#### SEQUENCE LISTING

- (1) GENERAL INFORMATION:
  - (i) APPLICANT: de la Monte, Suzanne Wands, Jack R.
  - (ii) TITLE OF INVENTION: Transgenic Animals and Cell Lines for Screening Drugs Effective for the Treatment or Prevention of Alzheimer's Disease
  - (iii) NUMBER OF SEQUENCES: 14
  - (iv) CORRESPONDENCE ADDRESS:
    - (A) ADDRESSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C.
    - (B) STREET: 1100 New York Ave., Suite 600
    - (C) CITY: Washington
    - (D) STATE: DC
    - (E) COUNTRY: USA
    - (F) ZIP: 20005-3934
  - (v) COMPUTER READABLE FORM:
    - (A) MEDIUM TYPE: Floppy disk
    - (B) COMPUTER: IBM PC compatible
    - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
    - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
  - (vi) CURRENT APPLICATION DATA:
    - (A) APPLICATION NUMBER:
    - (B) FILING DATE:
    - (C) CLASSIFICATION:
  - (viii) ATTORNEY/AGENT INFORMATION:
    - (A) NAME: Esmond, Robert W.
    - (B) REGISTRATION NUMBER: 32,893
    - (C) REFERENCE/DOCKET NUMBER: 0609.4370000
    - (ix) TELECOMMUNICATION INFORMATION:
      - (A) TELEPHONE: 202-371-2600
      - (B) TELEFAX: 202-371-2540
- (2) INFORMATION FOR SEQ ID NO:1:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1442 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: both
  - (ii) MOLECULE TYPE: cDNA
  - (ix) FEATURE:
    - (A) NAME/KEY: CDS
    - (B) LOCATION: 15..1139
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

TTTTTTTTT TGAG ATG GAG TTT TCG CTC TTG TTG CCC AGG CTG GAG TGC

Met Glu Phe Ser Leu Leu Pro Arg Leu Glu Cys

1 5 10

Leu Il 27		Gly	Pro	Суѕ	Asp 275	Leu	Pro	Ala	Ser	Ala 280	Ser	Gln	Ser	Ala	
GGG AT Gly Il 285	T ACA e Thr	GGC Gly	GTG Val	AGC Ser 290	CAC His	CAC His	GCC Ala	CGG Arg	CTT Leu 295	ATT Ile	TTT Phe	AAT Asn	TTT Phe	TGT Cys 300	914
TTG TT Leu Ph															962
CCA AA Pro As															1010
TCC TG Ser Cy															1058
CAC CC His Pr 35	o Ala														1106
TTG TC Leu Se 365										TGAG	CCA	CCT (	SCCT(	CAGCCT	1159
TCCAAA	GTGC :	rggga	ATTAC	CA GO	GCGT	SAGCO	ACC	CTCAC	CCCA	GCC	GCT	AAT ?	rtag <i>i</i>	AAAATA	1219
АААТАТ	GTAG (	CAATO	GGGG	G TO	CTTGC	CTATO	TTC	GCCC	AGGC	TGGT	CTC	AAA (	CTTC:	rggctt	1279
CATGCA	ATCC 7	TTCCA	AATO	A GO	CCACA	AACA	CCA	AGCC	AGTC	ACAT	rTTT	TA A	AACA	STTACA	1339
TCTTTA	TTTT A	AGTAT	ACT	AG AZ	AAGTA	ATA	CAA	DAAAT	CATG	TCA	AACC!	rgc A	TAAL	CAGTA	1399
GTAACA	GAGT 1	rcttī	TAT	AA CT	TTTT?	AAACA	A AAC	CTT	TAGA	GCA					1442

# (2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 375 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Met Glu Phe Ser Leu Leu Pro Arg Leu Glu Cys Asn Gly Ala Ile 1 5 10 15

Ser Ala His Arg Asn Leu Arg Leu Pro Gly Ser Ser Asp Ser Pro Ala
20 25 30

Ser Ala Ser Pro Val Ala Gly Ile Thr Gly Met Cys Thr His Ala Arg 35 40 45

Leu Ile Leu Tyr Phe Phe Leu Val Glu Met Glu Phe Leu His Val Gly 50 55 60

Gln Ala Gly Leu Glu Leu Pro Thr Ser Asp Asp Pro Ser Val Ser Ala 65 70 75 80

Ser Gln Ser Ala Arg Tyr Arg Thr Gly His His Ala Arg Leu Cys Leu

ААТ	GGC	GCA	ATC	TCA	GCT	CAC	CGC	AAC	СТС	CGC	CTC	CCG	GGT	тса	AGC	98
					Ala											30
					GCC Ala											146
					ATT Ile 50											194
					GCT Ala											242
					CAA Gln											290
CGG Arg	CTC Leu	TGC Cys 95	CTG Leu	GCT Ala	AAT Asn	TTT Phe	TGT Cys 100	GGT Gly	AGA Arg	AAC Asn	AGG Arg	GTT Val 105	TCA Ser	CTG Leu	ATG Met	338
					CCT Pro											386
					TAC Tyr 130											434
					CAC His											482
_					AGC Ser											530
					GCC Ala											578
CAC His	TAC Tyr 190	ACC Thr	TGG Trp	CTA Leu	ATT Ile	TTT Phe 195	ATT Ile	TTT Phe	ATT Ile	TTT Phe	AAT Asn 200	TTT Phe	TTG Leu	AGA Arg	CAG Gln	626
AGT Ser 205	CTC Leu	AAC Asn	TCT Ser	GTC Val	ACC Thr 210	CAG Gln	GCT Ala	GGA Gly	GTG Val	CAG Gln 215	TGG Trp	CGC Arg	AAT Asn	CTT Leu	GGC Gly 220	674
TCA Ser	CTG Leu	CAA Gln	CCT Pro	CTG Leu 225	CCT Pro	CCC Pro	GGG Gly	TTC Phe	AAG Lys 230	TTA Leu	TTC Phe	TCC Ser	TGC Cys	CCC Pro 235	AGC Ser	722
					GAC Asp											770
TTT Phe	GTA Val	TTT Phe 255	TTA Leu	GTA Val	GAG Glu	ATG Met	GGG Gly 260	TTC Phe	ACC Thr	ATG Met	TTC Phe	GCC Ala 265	AGG Arg	TTG Leu	ATC Ile	818
TTG	ATC	TCT	GGA	ССТ	TGT	GAT	CTG	ССТ	GCC	TCG	GCC	TCC	CAA	AGT	GCT	866

85 90 95

Ala Asn Phe Cys Gly Arg Asn Arg Val Ser Leu Met Cys Pro Ser Trp 105 Ser Pro Glu Leu Lys Gln Ser Thr Cys Leu Ser Leu Pro Lys Cys Trp Asp Tyr Arg Arg Ala Ala Val Pro Gly Leu Phe Ile Leu Phe Phe Leu 135 Arg His Arg Cys Pro Thr Leu Thr Gln Asp Glu Val Gln Trp Cys Asp 150 His Ser Ser Leu Gln Pro Ser Thr Pro Glu Ile Lys His Pro Pro Ala 170 Ser Ala Ser Gln Val Ala Gly Thr Lys Asp Met His His Tyr Thr Trp 185 Leu Ile Phe Ile Phe Ile Phe Asn Phe Leu Arg Gln Ser Leu Asn Ser 200 Val Thr Gln Ala Gly Val Gln Trp Arg Asn Leu Gly Ser Leu Gln Pro Leu Pro Pro Gly Phe Lys Leu Phe Ser Cys Pro Ser Leu Leu Ser Ser 235 Trp Asp Tyr Arg Arg Pro Pro Arg Leu Ala Asn Phe Phe Val Phe Leu 245 250 Val Glu Met Gly Phe Thr Met Phe Ala Arg Leu Ile Leu Ile Ser Gly 260 Pro Cys Asp Leu Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly 280 Val Ser His His Ala Arg Leu Ile Phe Asn Phe Cys Leu Phe Glu Met Glu Ser His Ser Val Thr Gln Ala Gly Val Gln Trp Pro Asn Leu Gly 305 310 Ser Leu Gln Pro Leu Pro Pro Gly Leu Lys Arg Phe Ser Cys Leu Ser 330 Leu Pro Ser Ser Trp Asp Tyr Gly His Leu Pro Pro His Pro Ala Asn Phe Cys Ile Phe Ile Arg Gly Gly Val Ser Pro Tyr Leu Ser Gly Trp

Ser Gln Thr Pro Asp Leu Arg 370 375

- (2) INFORMATION FOR SEQ ID NO:3:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1381 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: both
  - (ii) MOLECULE TYPE: cDNA

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

					•	
TTTTTTTTT	GAGATGGAGT	TTTCGCTCTT	GTTGCCCAGG	CTGGAGTGCA	ATGGCGCAAT	60
CTCAGCTCAC	CGCAACCTCC	GCCTCCCGGG	TTCAAGCGAT	TCTCCTGCCT	CAGCCTCCCC	120
AGTAGCTGGG	ATTACAGGCA	TGTGCACCAC	GCTCGGCTAA	TTTTGTATTT	TTTTTTAGTA	180
GAGATGGAGT	TTAACTCCAT	GTTGGTCAGG	CTGGTCTCGA	ACTCCCGACC	TCAGATGATC	240
TCCCGTCTCG	GCCTGCCCAA	AGTGCTGAGA	TTACAGGCAT	GAGCCACCAT	GCCCGGCCTC	300
TGCCTGGCTA	ATTTTTGTGG	TAGAAACAGG	GTTTCACTGA	TGTTGCCCAA	GCTGGTCTCC	360
TGAGCTCAAG	CAGTCCACCT	GCCTCAGCCT	CCCAAAGTGC	TGGGATTACA	GGCGTCAGCC	420
GTGCCTGGCC	TTTTTATTT	ATTTTTTTA	AGACACAGGT	GTACCACTCT	TACCCAGGAT	480
GAAGTGCAGT	GGTGTGATCA	CAGCTCACTG	CAGCCTTCAA	CTCCTGAGAT	CAAGCAATCC	540
TCCTGCCTCA	GCCTCCCAAG	TAGCTGGGAC	CAAAGACATG	CACCACTACA	CCTGGTAATT	600
TTTATTTTTA	ТТТТТААТТТ	TTTGAGACAG	AGTCTCACTC	TGTCACCCAG	GCTGGAGTGC	660
AGTGGCGCAA	TCTTGGCTCA	CTGCAACCTC	TGCCTCCCGG	GTTCAAGTTA	TTCTCCTGCC	720
CCAGCCTCCT	GAGTAGCTGG	GACTACAGGC	GCCCACCACG	CCTAGCTAAT	TTTTTTGTAT	780
TTTTAGTAGA	GATGGGGTTT	CACCATGTTC	GCCAGGTTGA	TCTTGATCTC	TTGACCTTGT	840
GATCTGCCTG	CCTCGGCCTA	CCCAAAGTGC	TGGGATTACA	GGTCGTGACT	CCACGCCGGC	900
CTATTTTTAA	TTTTTGTTTG	TTTGAAATGG	AATCTCACTC	TGTTACCCAG	GTCGGAGTGC	960
AATGGCAAAT	CTCGGCTACT	CGCAACCTCT	GCCTCCCGGG	TCAAGCGATT	CTCCTGTCTC	1020
AGCCTCCCAA	GCAGCTGGGA	TTACGGGACC	TGCACCACAC	CCCGCTAATT	TTTGTATTTT	1080
CATTAGAGGC	GGGTTTACCA	TATTTGTCAG	GCTGGGTCTC	AAACTCCTGA	CCTCAGGTGA	1140
CCCACCTGCC	TCAGCCTTCC	AAAGTGCTGG	GATTACAGGC	GTGAGCCACC	TCACCCAGCC	1200
GGCTAATTTG	GAATAAAAAA	TATGTAGCAA	TGGGGGTCTG	CTATGTTGCC	CAGGCTGGTC	1260
TCAAACTTCT	GGCTTCAGTC	AATCCTTCCA	AATGAGCCAC	AACACCCAGC	CAGTCACATT	1320
TTTTAAACAG	TTACATCTTT	ATTTTAGTAT	ACTAGAAAGT	AATACAATAA	ACATGTCAAA	1380
С						1381
					•	

# (2) INFORMATION FOR SEQ ID NO:4:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 1418 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: both (D) TOPOLOGY: both
- (ii) MOLECULE TYPE: cDNA

### (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4: TTTTTTTTT GAGATGGAGT TTTCGCTCTT GTTGCCCAGG CTGGAGTGCA ATGGCGCAAT 60 CTCAGCTCAC CGCAACCTCC GCCTCCCGGG TTCAAGCGAT TCTCCTGCCT CAGCCTCCCC 120 AGTAGGCTGG GATTACAGGC ATGTGCACCA CGCTCGGCTA ATTTTGTATT TTTTTTAGT 180 AGAGATGGAG TTTCTCCATG TTGGTCAGGC TGGTCTCGAA CTCCGACCTC AGATGATCCT 240 CCCGTCTCGG CCTCCCAAAG TGCTAGATAC AGGACTGAGC ACCATGCCCG GCCTCTGCCT 300 GGCTAATTTT TGTGGTAGAA ACAGGGTTTC ACTGATGTGC CCAAGCTGGT CTCCTGAGCT 360 CAAGCAGTCC ACCTGCCTCA GCCTCCCAAA GTGCTGGGAT TACAGGCGTG CAGCCGTGCC 420 TGGCCTTTTT ATTTTATTTT TTTTAAGACA CAGGTGTCCC ACTCTTACCC AGGATGAAGT 480 GCAGTGGTGT GATCACAGCT CACTGCAGCC TTCAACTCTG AGATCAAGCA TCCTCCTGCC 540 TCAGCCTCCC AAAGTAGCTG GGACCAAAGA CATGCACCAC TACACCTGGC TAATTTTTAT 600 TTTTATTTT AATTTTTGA GACAGAGTCT CAACTCTGTC ACCCAGGCTG GAGTGCAGTG 660 GCGCAATCTT GGCTCACTGC AACCTCTGCC TCCCGGGTTC AAGTTATTCT CCTGCCCCAG 720 CCTCCTGAGT AGCTGGGACT ACAGGCGCCC ACCACGCCTA GCTAATTTTT TTGTATTTTT 780 AGTAGAGATG GGGTTTCACC ATGTTCGCCA GGTTGATGCT AGATCTCTTG ACCTTGTGAT 840 CTGCCTGCCT CGGCCTCCCA AAGTGCTGGG ATTACAGGAC GTGACGCCCA CCGCCCGGCC 900 TATTTTAAT TTTTGTTTGT TTGAAATGGA ATCTCACTCT GTTACCCAGG CTGGAGTGCA 960 ATGGCCAAAT CTCGGCTCAC TGCAACCTCT GCCTCCCGGG CTCAAGCGAT TCTCCTGTCT 1020 CAGCCTCCCA AGCAGCTGGG ATTACGGGCA CCTGCACCAC ACCCCGCTAA TTTTTGTATT 1080 TTCATTAGAG GCGGGGTTTC ACCATATTTG TCAGGCTGGT CTCAAACTCC TGACCTCAGG 1140 TGACCCACCT GCCTCAGCCT TCCAAAGTGC TGGGATTACA GGCGTGACGC CTCACCCAGC 1200 CGGCTAATTT AGATAAAAA ATATGTAGCA ATGGGGGGTC TTGCTATGTT GCCCAGGCTG 1260 GTCTCAAACT TCTGGCTTCA TGCAATCCTT CCAAATGAGC CACAACACCC AGCCAGTCAC 1320 ATTTTTAAAC AGTTACATCT TTATTTTAGT ATACTAGAAA GTGATACGAT AACATGGCGG 1380 AACCTGCAAA TTCGAGTAGT ACAGAGTCTT TTATAACT 1418

### (2) INFORMATION FOR SEO ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 22 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:9:	
TTCATCCT	GG GTAAGAGTGG GACACCTGTG	30
(2) INFO	RMATION FOR SEQ ID NO:10:	
(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 26 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
(ii)	MOLECULE TYPE: cDNA	
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:10:	
TGGTGCAT	GT CTTTGGTCCC AGCTAC	26
(2) INFO	RMATION FOR SEQ ID NO:11:	
(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 30 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
(ii)	MOLECULE TYPE: cDNA	
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:11:	
ATCAACCT	GG CGAACATGGT GAACCCCATC	30
(2) INFO	RMATION FOR SEQ ID NO:12:	
(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 14 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
	MOLECULE TYPE: cDNA	
	SEQUENCE DESCRIPTION: SEQ ID NO:12:	
CACTGCAC		14
	RMATION FOR SEQ ID NO:13:	
, (1)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 14 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
(ii)	MOLECULE TYPE: cDNA	

TGTCC	CCACTC TTACCCAGGA TG	22
(2) I	INFORMATION FOR SEQ ID NO:6:	
	(i) SEQUENCE CHARACTERISTICS:  (A) LENGTH: 24 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
(	(ii) MOLECULE TYPE: cDNA	
. (	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:	
AAGCA	AGGCAG ATCACAAGGT CCAG	24
(2) I	INFORMATION FOR SEQ ID NO:7:	
	(i) SEQUENCE CHARACTERISTICS:  (A) LENGTH: 20 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
(	ii) MOLECULE TYPE: cDNA	
(	xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:	
AATGG	SATGAC GATATCGCTG	20
(2) I	INFORMATION FOR SEQ ID NO:8:	
	(i) SEQUENCE CHARACTERISTICS:  (A) LENGTH: 19 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
(	ii) MOLECULE TYPE: cDNA	
(	xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:	
ATGAG	GTAGT CTGTCAGGT	19
(2) I	NFORMATION FOR SEQ ID NO:9:	
	<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 30 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
(	ii) MOLECULE TYPE: cDNA	



(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:	
CCAGGTGTAG NCCA	14
(2) INFORMATION FOR SEQ ID NO:14:	
<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 14 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
(ii) MOLECULE TYPE: cDNA	

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

CAAGGTCCAG NCCA

14